the public from time immemorial. There are several roads and footpaths in close proximity to the monument, and the council were unanimous in their opinion that the right of the public to the use of those roads should be maintained. Stonehenge is a source of considerable revenue to Salisbury and district, and the prevailing opinion is that the monument should be acquired by the State.

IN 'Memoires et Compte Rendus des Travaux de la Société des Ingenieurs Civils de France' an extended account is given by M. Chalon of the progress made in that country by 'Metal déployé,' since its introduction from the United States in 1898. The first machine producing Golding's new product was installed in June, 1898, and six are now unequal to the requirements of that country. The process and manufacture are very fully described. The metal used is a steel containing very little C., less than 0.7 per cent Mn., a trace of S. and of Si., and 0.1 per cent. O.

Mr. GIFFORD PINCHOT, Forester of the U. S. Department of Agriculture, in the last number of the *National Geographic Magazine*, gives an interesting explanation of the method by which longleaf pine seedlings protect themselves against forest fires. In addition to bark which is not uncommonly as thick as the wood (the whole diameter being thus two-thirds bark and one third wood), the young trees add a device specially adapted for their safety when growing amid long grass, with which they are almost always associated. "During the first four or five years the long leaf seedling reaches a height of but four or five inches above the ground; but while the stem during these early years makes little progress, the long needles shoot up and bend over in a green cascade which falls to the ground in a circle about the seedling. Not only does this barrier of green needles itself burn only with difficulty, but it shades out the grass around the young stem, and so prepares a double fire-resisting shield about the vitals of the young tree. Such facts explain why the fire which has restricted the growth of evergreen oaks in parts of Florida, for example, has made a pure forest of pines in a region where the reproduction of the oaks is phenomenally rapid wherever the annual fires cannot run."

A PRIZE of 100,000f. has been founded by the heirs of the late Mr. Anthony Pollok, of Washington, to be awarded during the Universal Exhibition which is to be held in Paris in 1900, to the inventor of the best apparatus for the saving of life in case of maritime disaster. The prize is open to universal competition. This sum is now in deposit with the American Security and Trust Company of Washington, D. C., and will be paid over to the successful competitor when a decision shall have been rendered by an appointed jury, and formally communicated to the Secretary of State of the United States, through the Commissioner-General of the United States to the International Exhibition of 1900. The juror selected on behalf of the United States is Lieutenant William S. Sims, U. S. N., Naval Attaché of the Embassy of the United States at Paris. In considering the award the jury will be governed by the following conditions: (1) The total amount of the prize may be awarded to a single individual on condition that the invention is of sufficient practical value and importance to justify the proposed award; (2) should several persons enter inventions of equal value, the jury, as it shall consider right and just, may award a portion of the prize to each; (3) should none of the inventions entered be of sufficient value to entitle it to the prize, the jury may reject any and all of them, but at the same time shall be empowered to indemnify competing inventors in such amounts as may be deemed advisable. The instructions to competitors will be issued in due course by the jury, with the sanction and approval of the authorities of the French Exhibition. These will be distributed upon application. Correspondence, however, may be addressed to the members of the jury at Paris, or to Mr. Charles J. Bell, President of the American Security and Trust Company, No. 1405 G Street, Washington, D. C.

UNIVERSITY AND EDUCATIONAL NEWS.

THE will of Dr. Calvin Ellis, formerly Dean of the Harvard Medical School, has only recently been probated, though his death occurred some years ago. It leaves about $140,000 to

Harvard University. A fund of $50,000 is to be used to defray the expenses of descendants of the family at Harvard College. If not required it is to be spent for the general purposes of the College. The balance of the money is to be used for the Medical School. Miss Lucy Ellis, a sister of Dr. Ellis has now bequeathed about $90,000, the money to be added to the fund left by Dr. Ellis.

Provost C. Harrison, of the University of Pennsylvania, announces a gift of $50,000 from an anonymous donor, the money to be used for the cost of erection of that part of the dormitory system already begun.

By the will of the late John H. Sessions, $25,000 is bequeathed to Wesleyan University, Middletown, Conn.

The Iowa Wesleyan University has received a gift of $10,000 from Ex-Senator James Harlan.

The last session of the Michigan Legislature raised the tax for the support of the State University from one-sixth to one-fourth of a mill of each dollar of assessed valuation, thus increasing the annual income by a little over $92,000.

The *British Medical Journal* gives the following statistics in regard to the universities of France. These are fifteen in number and together have a total of 27,080 students, of whom 12,059 belong to Paris. The total expenditure is 13,859,500 francs, so that the average cost of the education of each student is 511 francs. To meet this expense the universities have revenues amounting collectively to 2,093,700 francs; legacies, donations, etc., amount to 1,511,600 francs; therefore a deficit of 10,524,200 francs, has each year to be made up by the State.

Among the candidates for the Chair of Natural Philosophy in the University of Glasgow are Mr. C. T. R. Wilson, Mr. J. A. M'Clelland and Mr. G. F. C. Searle, all demonstrators in the Cavendish Laboratory, Cambridge; Mr. John Sealy Townsend, Cambridge; Mr. George W. Walker, Cambridge; Professor Andrew Gray, University College, North Wales; Professor J. C. Beattie, Cape Town, and Mr. Cargill Gilston Knott, Edinburgh University.

Since Mr. R. M. Wenley, Ph.D. (Glasgow), Sc.D., F.R.S. (Edinburgh), was appointed to the headship of the philosophical department in the University of Michigan, the teaching staff has been doubled and now numbers six. Among recent appointments are Mr. Alfred H. Lloyd, Ph.D. (Harvard), to be junior professor of philosophy; Mr. W. B. Pillsbury, Ph.D. (Cornell), to be director of the Laboratory of Experimental Psychology; Mr. Carl V. Tower, Ph.D. (Cornell), to be instructor in philosophy, and Mr. J. W. Slaughter, A.B. (Lombard), to be assistant in psychology and philosophy.

Dr. Alonzo E. Taylor, assistant director of the Pepper Laboratory of the University of Pennsylvania, has been elected professor of pathology in the medical department of the University of California.

Dr. Henry S. Monroe, dean of the faculty of applied sciences of Columbia University, has resigned on account of ill health. He is succeeded by Professor F. H. Hutton.

L. F. Walter and H. Fisher have been appointed assistants in chemistry in Columbia University.

Professor Richard Morris, superintendent of public schools in Dunellen, N. J., has been appointed professor of mathematics at Rutger's College.

Ezra F. Scattergood, instructor in electricity and physics in Rutger's College, has been appointed professor of physics in the Atlanta School of Technology.

Vacancies in the chemical and electrical departments of the University of Vermont have been filled by the appointment of C. E. Jacobs, of the Massachusetts Institute of Technology, and W. H. Freedman, of Columbia University.

Mr. A. G. Ashcroft has been appointed assistant professor of engineering at the Central College of the City and Guilds of London Institute.

The Rev. J. F. Cross, B.A. Cambridge, M.A., Toronto, has been made professor of mathematics at St. John's University, Winnipeg.

Dr. K. Eckhardt, professor of physiology at Giessen, has celebrated the fiftieth anniversary of his activity as a university teacher.